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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

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Technology Center 2100

Application Number: 09/957,014
Filing Date: September 20, 2001
Appellant(s): RUSSELL ET AL.

Paul C. Gosnell (46,735)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on May 23, 2007, appealing from the Final Office action mailed on October 4, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,810,420	Buse et al,	10-2004
6,061,739	Reed et al.	5-2000
6,115,545	Mellquist	9-2002

Cheshire teal., Current Meeting Report, Network in the Small-aka Home Network, page by Cheshire et al., pages 1-7, 03/1999.

Troll, Network Working Group: Request for Comments (2563):DHCP Option to Disable Stateless Auto-Configuration in IPV4 Client Troll, R, @Home Network, May 1999.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 9-10, 17 and 25 are rejected under 35 U.S.C. §103(a) as being obvious over Buse et. al. (US 6,810,420) referred to as Buse hereafter in view of Cheshire et. al. (Cheshire), 03/1999.

Regarding claim 1, Buse teaches a scheme for allocating over a network an IP address to a device (col. 3/lines 5-8), including assigning an IP address to a device (Fig. 2), the scheme including a computer (2 or 3) and a device communicatively coupled to network (1) (Figs. 1-2, col. 1/lines 38-45, col. 2/lines 28-36), thereby said network providing communicative interconnection between said computer and said device;

said computer assigning said Internet Protocol. IP address to said device over the network (col. 3/lines 5-8, 16-19, col. 2/lines 46-49, 50-54), including generating an IP address (step 36 of Fig. 3) (col. 4/lines 1-3); determining that the IP address is in use (steps 37-38 of Fig. 3) (col. 3/lines 38-40); using an address resolution protocol. to determine if the IP is in use (col. 3/lines 40-41); wherein if said IP address is not in use, then assigning said IP address to said device via the network (step 34 of Fig. 3) (col. 4/lines 38-40) and configuring the device with said IP address (col. 3/lines 26-28); although Buse suggest using an address resolution protocol., it does not explicitly the use of a probe, nor where assigning an IP address to a device is performed by assigning the address to the network adapter of the device which connects the device to the network.

Cheshire discloses the configuration a new devices connected to a network by configuring the IP addressing and other stack parameters, thereof, including configuring the device's interface with and IP address (pages 2-3); disclosing incorporating a randomly generated internet protocol. address in an address resolution protocol. (ARP) probe (page 3); sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and if said internet protocol. address is not in use, then assigning said internet protocol. address to said network interface via said (LAN) network (page 3). Therefore, It would have been obvious for one ordinary skilled in the art at the time the invention was made to recognize that given the suggestions of Buse for configuring over a network a device

coupled thereto with an IP address using an address resolution protocol., to include the use of a probe and assign the IP address to the device's network interface which connects the device to the network. Each device connected to the network is uniquely identified by its connection to network, this single connection is represented by the IP address which provides access for all other devices systems connected to the network, thereby, it is obvious to one ordinary skilled in the art, that the network adapter (network interface or NIC) is assigned this IP address as exemplified in the Cheshire reference. One would be motivation to combine the references because each reference was directed to allocating an IP address to a device with minimal user intervention, one ordinary skilled in the are would be motivated to combine the teachings of the references.

Regarding claim 9, said device is a printer (Cheshire: page 5).

Regarding claim 10, said network adapter is a ("low-cost") network interface (adapter)(Cheshire: page 3).

Regarding claim 17, this claim comprised a network based ("imaging") system, including limitations on claim 1 when combined including the instructions executable on a computer to perform the method steps disclosed on the method claim 1, same rationale of rejection is applicable.

Regarding claim 25, this apparatus (system) claim is substantially the same as the method claim 10, same rationale of rejection is applicable.

Claims 2-6 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse in view of Cheshire in further view of Reed et. al. (Reed) U.S. Patent No. 6,061,739.

Regarding claim 2-5, iterating i.e. repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (Cheshire page 3), however Cheshire does not explicitly teach wherein the predetermined number is 30; Reed teaches a first host computer incorporating a generating an internet protocol. address in a address resolution protocol. probe broadcast request (col. 2/lines 20-30); sending said address resolution on an Ethernet LAN network for determining if an interact protocol. address is in use (col. 2/lines 20-30); and wherein the number of requests is a preset threshold (col. 4/lines 19-20) and first specified time interval to wait for a response are programmable values (col. 5/lines 28-33). It would have been obvious to one ordinary skilled in the art at the time the invention was made to include means for repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (e.g. 30), motivation would be to program the number of request issues and the time to wait for a response based on network environment factors such as network latency and its dependency on network traffic, distance and the characteristic of the communication links.

Regarding claim 6, if said number of times said generating step is performed exceeds said predetermined number then said computer fails to automatically assign said network adapter an internet protocol. address (Cheshire: page 3).

Regarding claims 18-22, these apparatus (system) claims are substantially the same as the method claims 2-6 respectively, same rationale of rejection is applicable.

Claims 7, 11-16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse in view of Cheshire in further view of Mellquist U.S. Patent No. 6,115,545.

Regarding claim 7, although prior art discloses sending an ARP probe message (i.e. "broadcasting discovery packet") on said network; and determining if said network adapter has a "valid" internet protocol. address, it does not explicitly teach determining if internet protocol address is valid. Mellquist teaches that in order to configure a device with an internet protocol address it is required that a free address in the range of valid unique addresses must be selected and that a sub-net mask having a mask that must be the same on all entities across the sub-net is required (col. 3/lines 11-19); It would have been obvious to one ordinary skilled in the art at the time the invention was made to ensure that a unique valid internet address is used to configure a network device, as taught by the reference, where such validation includes verifying that an internet protocol address having the same mask as all entities on the subnet, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

Regarding claim 11, this claim is substantially the same as claims 1 and 7 as discussed above, same rationale of rejection is applicable.

Regarding claim 12, wherein if said internet protocol. address is in use, then further comprising the step of repeating said generating step, said incorporating step, said sending step and said determining step (Cheshire, page 3).

Regarding claims 13-16, these claims are substantially the same as claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claim 23, this apparatus (system) claim is substantially the same as claim 7, same rationale of rejection is applicable.

Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse- Cheshire in view of Mellquist in further view of Request for Comments (2563), Troll, May 1999.

Regarding claim 8, however the above-mentioned prior art of record does not explicitly teach determining whether said network allows said computer to assign an internet protocol. address to network devices, prior to generating step; Troll teaches client nodes configured to be able to determine whether or not the network is being centrally administrated, allowing it determine whether or not it should assign itself a IP (link-local) address (page 2), including an Auto-configure option which allows a computer node to determine whether or not it should generate an IP address (page 3) (i.e. prior to performing the generating step).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the Troll teachings to implement determining whether said network allows said computer to assign an internet protocol address to said network adapter, motivation would be to enable the flexibility of an Auto-configure Option along with the IP address assignment that notifies the client that the network does not have an IP address to offer upon determining the absence of an DHCP server.

Regarding claims 24, this apparatus (system) claim is substantially the same as claim 8, same rationale of rejection is applicable.

(10) Response to Argument

A. Regarding claim 1 rejected under 103 as being unpatentable over Buse in view of Cheshire, it is argued that (p. 9 of remarks), Buse does provide a device with IP according to applicant, however, does not teach the following features of the claimed invention: does not generate an IP address; incorporating the IP address in an ARP probe; sending the ARP probe on the network; determining whether a response to the ARP probe indicated that the IP address is in use and assigning the IP address to the network adapter via the network if the internet protocol. address is not in use, as recited in claim 1.

In response to the above-mentioned argument, claim rejection has carefully been reviewed, and applicant's interpretation of the applied prior art has been considered. However, claim 1 is rejected as being unpatentable over Buse in view of Cheshire.

Arguments against a reference individually, cannot show nonobviousness where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413,208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the features which applicant argues are not taught by the prior art has been reviewed, however, the applied prior art teaches: Buse teaches a scheme for allocating over a network an IP address to a device (col. 3/lines 5-8), including assigning an IP address to a device (Fig. 2), determining that the IP address is in use (steps 37-38 of Fig. 3) (col. 3/lines 38-40); using an address resolution protocol. (ARP) to determine if the IP is in use (col. 3/lines 40-41); wherein if said IP address is not in use, then assigning said IP address to said device via the network (step 34 of Fig. 3) (col. 4/lines 38-40) and configuring the device with said IP address (col. 3/lines 26-28);

Cheshire discloses the configuration a new devices connected to a network by configuring the IP addressing and other stack parameters, thereof, including configuring the device's interface with and IP address (pages 2-3); disclosing incorporating a randomly generated internet protocol. address in an address resolution protocol. (ARP) probe (page 3); sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and if said internet protocol. address is not in use, then assigning said internet protocol address to said network interface via said (LAN) network (page 3).

B. Regarding claim 1 rejected under 103 as being unpatentable over Buse in view of Cheshire, it is argued that (p. 9 of remarks), that the claimed invention is distinguishable over the applied prior art because, the Cheshire reference discloses a device that configures itself.

In response to the above-mentioned argument, claim rejection has carefully been reviewed, however claim 1 is rejected as being unpatentable over Buse in view of Cheshire. Buse discloses a device that is provided and IP address. Being that a computer provides an IP address to a network device, thereby the device does *not perform self-configuration,* and the computer does not *obtain for itself an IP address.* Arguments against a reference individually, cannot show nonobviousness where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413,208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

C. Regarding claim 1 rejected under 103 as being unpatentable over Buse in view of Cheshire, it is argued (p. 9-10 of remarks), that there is no motivation to modify Buse with Cheshire, because according to applicant, the applied prior art must suggest the desirability of the modification.

In response to applicant's argument that there is no suggestion to combine the references, however, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves

or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

D. Regarding claim 1 rejected under 103 as being obvious over Buse in view of Cheshire, it is argued (p. 10 of remarks), that there is no motivation based on the references or knowledge generally available to those of ordinary skill in the art has been provided. Because, according to applicant a general assertion that each reference was directed to allocating an IP address to a device with minimal user intervention and this does not purport to assert that Buse and/or Cheshire suggest an advantage.

In response to applicant's argument that there is no suggestion to combine the references, however, in accordance with MPEP 706.020) there must be some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art and the applied motivation complies with these requirements. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Buse discloses that when a new device is connected into an existing network, typically a local area network, it is desirable to determine whether such a device has a protocol address, which is compatible with other' devices on the network, and to allocate the protocol address to the device if it does not already possess one. Another aspect of the process is the discovery of a device, which does not have a protocol. address on a network and to configure its protocol address in a convenient and compatible manner (column 1/lines 10-20). Figure 3 illustrates a scheme by which

the IP address may be allocated to an unconfigured device newly discovered on the network. The stages shown in Fig. 3 are all performed by the proxy device 3 on behalf of the "new" device 4, an IP address may be automatically allocated, if an address is not provided a user is prompted to provide the address (col. 3/lines 16-col. 4/line 10). Cheshire discloses where currently many vendors are looking at IP based devices that *Should have "plug and play behavior",* where IP currently fails the simplicity test - if one were to go to a CostCO and buy 2 PCs and an Ethernet hub someone *would still have to* configure the IP addressing and other stack parameters. Discussing that when one considers that to print many people then have to go edit their/etc/printcap nd/etc/resolv.conf files we should turn red in embarrassment. With Appletalk and NetBIOS over NetBeui or IPX you can *bring a system up* and print with *minimal (close to zero) configuration.* Beyond simple addressing and DNS configuration *we also need to worry about* router, proxy and NAT *configs that get more daunting every day.* Brent Miller from IBM Raleigh went through a brief description of the requirements his team from IBM developed for Home networks. Basic assumptions include that there is a home LAN that is intermittently connected to the Internet and the LAN and LAN clients use standard IETF protocols. *A computer that is introduced to this LAN should be able to* enjoy basic connectivity to other similar systems and to services on that network. IN short, things should " just work". Brent discussed a taxonomy of requirements from the draft including: Autoconfiguration: 1P address assignment to new devices, Service/Device location, and the use of User-friendly names. Automatic 1P address assignment for link local address w 1Pv4. Stuart Cheshire presented a basic

overview of 1Pv4 addresses self-configuration as currently implemented by Apple and MS. The purpose is to support configuration of basic stacks without manual configuration. Stuart pointed out that both Apple and Microsoft are attempting to move towards complete use of IETF standard protocols in replacement of their legacy protocols (Appletalk and NetBeui). Thus, Cheshire seems to be concern with achieving "plug and play behavior", bring a system up and print with minimal (close to zero) configuration, connect a computer to a LAN to allow the computer to enjoy basic connectivity to other similar systems and to services on that network. IN short, things should "ust work", and to support configuration of basic stacks without manual configuration, where currently both Apple and Microsoft are attempting to move towards complete use of IETF standard protocols in replacement of their legacy protocols (Appletalk and NetBeui). Hence, arguments that the general assertion that each reference was directed to allocating an IP address to a device with minimal user intervention does not purport to assert that Buse and/or Cheshire suggest an advantage, are not persuasive.

E. Regarding claim 1 rejected under 103 as being obvious over Buse in view of Cheshire, it is argued (p. 11 of remarks), it is argued that there is no motivation to modify a method for configuration by "a proxy which is operational in of itself' in the Buse references.

In response to the above-mentioned argument, applicant interpretation of the applied prior art is noted, however, returning to what is claimed, claim 1 recites, a computer generating an internet protocol. address. Buse teaches a computer and a

device communicatively coupled to network (Figs. 1-2, col. I/lines 38-45, col. 2/lines 28-36); said computer assigning said Internet Protocol. IP address to said device over the network (col. 3/lines 5-8, 16-19, col. 2/lines 46-49, 50- 54), including generating an IP address (step 36 of Fig. 3) (col. 4/lines 1-3). It is noted that the proxy device is a personal computer coupled to a local area network, and which facilitates the discovery of devices, which may or may not be configured with an IP address (column 1, lines 38-42). It is further noted that the features upon which applicant relies (i.e., "not a proxy which is operational in of itself, nor a computer that is not operational in of itself') are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

F. Regarding claim 17, rejected under 103 as being unpatentable over Buse in view of Cheshire it is argued (p. 12 of remarks), the applied prior art does not teach claim limitation as recited. Specifically, an imaging device, and a network adapter communicatively coupling the imaging device to the network, the network providing communicative interconnection between the computer and the network adapter.
In response to the above-mentioned argument, claim rejection has been review, particular the cited portions. The broadest reasonable interpretation has been applied to the claims as mandated, thereby, claimed "imaging device", for the purposes of examination given the broadest reasonable interpretation is a device. Specifically, "In the absence of an express intent to impart a novel meaning to the claim terms, the

words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). However, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (see MPEP 2106).
According to Applicant's specification: Networked device 14 may be an imaging device, such as a printer. In the embodiment of the invention described herein, networked device 14 will be in the form of a printer [0018 par]. The broadest reasonable interpretation has been applied to the claims as mandated, thereby, claimed "imaging device", for the purposes of examination given the broadest reasonable interpretation is a device. In this case, the applied prior art teaches a computer and a device communicatively coupled to network (Buse: Figs. 1-2, col. 1/lines 38-45, col. 2/lines 28-36), and IP assignment to new devices and configuring the interface with IP address, and start using interface (Cheshire: p. 2-3).

G. Regarding claim 2, rejected under 103 as being unpatentable over Buse in view of Cheshire in further view of Reed, it is argued (p. 13-14) that Reed does not teach configuring a device with an IP address, because according to applicant's interpretation Reed teaches self-configuration of an IP address.

In response to the above-mentioned argument, claim rejection has carefully been reviewed, however claim 1 is rejected as being unpatentable over Buse in view of Cheshire. Buse teaches a computer that provides an IP address to a network device,

thereby the device does *not perform self-configuration,* and the computer does not *obtain for itself an 1P address.* Arguments against a reference individually, cannot show nonobviousness where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413,208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically, Buse teaches a computer (2 or 3) and a device communicatively coupled to network (1) (Figs. 1-2, col. 1/lines 38-45, col. 2/lines 28-36), thereby said network providing communicative interconnection between said computer and said device; said computer assigning said Internet Protocol. IP address to said device over the network (col. 3/lines 5-8, 16-19, col. 2/lines 46-49, 50-54), including generating an IP address (step 36 of Fig. 3) (col. 4/lines 1-3).

Regarding claims 7, 11-16, and 23 rejected under 103 s being unpatentable over Buse in view of Cheshire in further view of Mellquist, it is argued (p. 16-18 of remarks), that the applied prior art does not teach claim invention as recited, because Mellquist teaches that addresses are usually administered by a person who allocated theses addresses.

In response to the above-mentioned argument, claim rejection has carefully been reviewed, however claim 7, 11-16 and 23 are rejected as being unpatentable over Buse in view of Cheshire in view of Mellquist. Buse discloses a device that is provided and IP address. Specifically, teaches a computer that provides an IP address to a network device, thereby the device does *not perform self-configuration,* and the computer does not *obtain for itself an 1P address.* Arguments against a reference individually, cannot show nonobviousness where the rejections are based on combinations of references.

See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Buse teaches a computer (2 or 3) and a device communicatively coupled to network (1) (Figs. 1-2, col. 1/lines 38-45, col. 2/lines 28-36), thereby said network providing communicative interconnection between said computer and said device; said computer assigning said Internet Protocol IP address to said device over the network (col. 3/lines 5-8, 16-19, col. 2/lines 46-49, 50- 54), including generating an IP address (step 36 of Fig. 3) (col. 4/lines 1-3).

H. Regarding claims 7, 11-16, and 23 rejected under 103 as being unpatentable over Buse in view of Cheshire in further view of Mellquist, it is argued (p. 19-20 of remarks), that the applied prior art does not teach claim invention as recited, because Mellquist does not teach determining if the network adapter has a valid internet protocol. address. Buse not Cheshire teach "checking if the IP address is supported by a general accepted authority, as might constitute determining if the network adapter has a valid internet protocol. address".

In response to the above-mentioned argument, applicant's interpretation of the applied prior art has been fully considered. Claim (7) limitation reads, determining if said network adapter has a valid internet protocol. address. According to applicant's specification, an IP address is considered valid if it is an appropriate address for the subnet to which the computer is connected, specifically, by comparing the value associated with the IP address of the adapter to the IP address of the computer and a subnet mask of the computer [par. 0031]. The broadest reasonable interpretation has been applied to the claim term "valid internet protocol address". Cheshire teaches

wherein internet protocol. address is assigned to the network interface of the device via said (LAN) network (page 3). Buse teaches where in response to an interrogation devices that see such an interrogation will respond with a reply, wherein unconfigured devices will respond with an IP address field set to a convention invalid value such as 0.0.0.0. [i.e. a determination]. If desired or appropriate the device may return in the appropriate fields values for a subnet mask (set to an invalid value if the device is unconfigured) [i.e. a determination] (col. 2/lines 23-45). If there is a DHCP server on the network, the proxy 3 will receive a DHCP response with an IP address for the device. The proxy can then send out a YOU_ARE frame configuring the device 4 with this IP address--stage 34. If the proxy does not receive a response to the DHCP request then it will timeout and move on to stage 35. If there is a time-out, there is a determination whether proxy's address is in the automatic private IP range. For the proxy to allocate IP addresses to devices using Automatic Private IP addressing, its own address must also be in this range [i.e. a determination]. If its address is not in this range and the device is allocated an IP address from the auto IP range then the proxy will not be able to communicate with the device using IP as they will be in separate Subnets. If it is in that range, an IP address may be automatically allocated, stage 36, the address may be tested for conflict with any existing addresses (stage 37). Further, when entered manually, the proxy checks whether the address is on the same subnet (stage 40) [i.e. a determination] (col. 3/lines 16-col. 4/lines 10).

The applied prior art teaches determining if said network adapter has a valid internet protocol. address. It is noted that the features upon which applicant relies (i.e.,

"checking if the IP address is supported by a general accepted authority, as might constitute determining if the network adapter has a valid internet protocol. address") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

I. Regarding claim 11 rejected under 103 as being unpatentable over Buse in view of Cheshire in further view of Mellquist, it is argued (p. 20-21 of remarks), that the applied prior art does not teach claim invention as recited, because Mellquist does not teach determining if the low cost network adapter has a valid internet protocol. address. Buse nor Cheshire, according to applicant teach "checking if the IP address is supported by a general accepted authority, as might constitute determining if the network adapter has a valid internet protocol. address". In response to the above-mentioned argument, claim rejection has been review, particular the cited portions. The broadest reasonable interpretation has been applied to the claims as mandated, thereby, claimed "low cost network adapter", for the purposes of examination given the broadest reasonable interpretation is an adapter. Specifically, "In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). However, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from

its ordinary and customary meaning. See In re Paulsen, 30 F.3d 1475, 1480, 3t USPQ2d 1671, 1674 (Fed. Cir. 1994) (see MPEP 2106).

In this case, the as discussed above, Cheshire teaches wherein internet protocol. address are assigned to the network interface of the device via said (LAN) network (page 3). Buse teaches where in response to an interrogation devices that see such an interrogation will respond with a reply, wherein unconfigured devices will respond with an IP address field set to a convenially invalid value such as 0.0.0.0. [i.e. a determination]. If desired or appropriate the device may return in the appropriate fields values for a subnet mask (set to an invalid value if the device is unconfigured) [i.e. a determination] (col. 2/lines 23-45). For the proxy to allocate IP addresses to devices using Automatic Private IP addressing, its own address must also be in this range [i.e. a determination]. Further, when entered manually, the proxy checks whether the address is on the same subnet (stage 40) [i.e. a determination] (col. 3/lines 16-col. 4/lines 10). The applied prior art teaches determining if said "low-cost" network adapter has a valid internet protocol. address.

J.

Regarding claim 23 rejected under 103 as being unpatentable over Buse in view of Cheshire in further view of Mellquist, it is argued (p. 21-22 of remarks), that the applied prior art does not teach claim invention as recited, because Mellquist does not teach determining if the network adapter has a valid interact protocol. address.

In response to the above-mentioned argument, claim rejection has been review, particular the cited portions. The broadest reasonable interpretation has been applied to

the claims as mandated, thereby, claimed "network adapter", for the purposes of examination given the broadest reasonable interpretation is an adapter and the broadest reasonable interpretation has been applied to the claim term "valid internet protocol. address", for the purposes of examination is determining if the ~ address is valid. Specifically, "In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). However, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (see MPEP 2106). In this case, the as discussed above, Cheshire teaches wherein internet protocol. address are assigned to the network interface of the device via said (LAN) network (page 3). Buse teaches where in response to an interrogation devices that see such an interrogation will respond with a reply, wherein unconfigured devices will respond with an IP address field set to a convenially invalid value such as 0.0.0.0. [i.e. a determination]. If desired or appropriate the device may return in the appropriate fields values for a subnet mask (set to an invalid value if the device is unconfigured) [i.e. a determination] (col. 2/lines 23-45). For the proxy to allocate IP addresses to devices using •Automatic Private IP addressing, its own address must also be in this range [i.e. a determination]. Further, when entered manually, the proxy checks whether the address is on the same subnet (stage 40) [i.e. a determination] (col. 3/lines 16-col.

4/lines 10). The applied prior art teaches determining if said network adapter has a valid internet protocol address.

K. Regarding claim 8, rejected under 103 s being unpatentable over Buse-Cheshire in view of Mellquist in further view of RFC 2563 (Troll), it is argued (p. 23-24) of remarks the applied references do not teach claim limitation as recited. Specifically, claim (8) reads, "determining whether a network that allows a computer to assign an internet protocol. address to a network adapter". Because according to applicant's interpretation Troll discloses that a DHCP client determines whether the network is centrally administered, thereby determining whether or not it should assign itself an address.

In response to the above-mentioned argument, claim rejection has been review, particular the cited portions. The broadest reasonable interpretation has been applied to the claims as mandated. According to applicant's disclosure: [0032] At step 106, computer 12 determines if network 16 allows automatic remote assignment of IP addresses. If network 16 allows automatic remote assignment of IP addresses, then process flow continues at step 108. Otherwise, the process terminates at step 120. Computer 12 provides for the manual assignment of an IP address, which is not a part of this invention, thus in the event network 16 does not allow automatic remote assignment of IP addresses, an IP address can be assigned manually.

[0006] IP addresses may be dynamically allocated by having a pool of IP addresses, such as an IP address pool, from which to draw each time an IP address is needed. Once a device connects to a network and is properly authenticated, an IP address is

allocated for use by the device. This task is normally performed by a Dynamic Host Configuration Protocol. (DHCP) server existing on the LAN. [0007] There are several industry standards by which a network device can automatically obtain an IP address information. Such standards include the aforementioned DHCP, Universal Plug and Play (UPNP) and other forms of Automatic Private IP Addressing (APIPA). Each of these standards require that significant network transactions be initiated and conducted by the network device itself which requires hardware and configuration storage, making them cost prohibitive for low-cost devices.

Thereby, [AS BEST UNDERSTOOD], claimed clause "a network that allows a computer to assign an internet protocol. address to a network adapter", simply means determining that DHCP server(s) are available on the network from which remote automatic IP addresses can be obtained for providing to a devices' network adapter. The "network" does not seem to allow the computer to perform claimed functions, a computer cannot perform anything, which is not configured to do. The devices on the network and the computer being configured to interact over the network with the devices thereon, the computer obtains the IP addresses from a DHCP server on the network. Buse teaches where the computer (col. 1/lines 39-40) is configured to sends a DHCP request on behalf of the device to provided with an IP address, and if there is a DHCP server on the network, the computer will receive a DHCP response with an IP address for the device, the computer can then send out a message configuring the device with this IP address. If the proxy does not receive a response to the DHCP request then it will timeout and move on to stage 35 (see steps 32-33 on Fig. 3 and col. 3/lines 20-40).

Thereby, Buse teaches determining whether "a network that allows a computer to assign an internet protocol. address to a network adapter", by determining that DHCP server(s) are available on the network from which remote automatic IP addresses can be obtained for providing to a devices' network adapter. Cheshire teaches a DHCP discover mechanism for determining the existence of DHCP servers on the network by means of a query, wherein if no reply a retry of 4, 8, and 16 seconds interval is performed and if not DHCP server replies then a subsequent action is performed. Cheshire further teaches where every 5 minutes sending a single DHCP Discover to determine if a DHCP server has come online on the LAN, if so then proceed to normal DHCP client behavior upon DHCPOffer message reception. Thereby, Cheshire teaches determining whether "a network that allows a computer to assign an internet protocol. address to a network adapter", by determining that DHCP server(s) are available on the network from which remote automatic IP addresses can be obtained. Troll teaches a method by which client will be able to determine whether or not the network is being centrally administrated (page 2). Thereby, the applied references teach determining whether "a network that allows a computer to assign an internet protocol. address to a network adapter", by determining that DHCP server(s) are available on the network from which remote automatic IP addresses can be obtained for providing to a devices' network adapter.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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